

AREAL GEOLOGY

STATE OF NEW JERSEY
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PASSAIC QUADRANGLE

LEGEND

SEDIMENTARY ROCKS
(Areas of subaqueous
deposits are shown by
patterns of parallel lines;
metamorphism is
indicated by hachures
combined with the line
patterns.)Kr
Raritan
formation
(coarse sand and dense,
variegated clays)

UNCONFORMITY

Rn
Newark
formation
(red sandstone and shale
with occasional outcrops
of conglomerate, etc.)

UNCONFORMITY

Sgp
Green Pond
conglomerate
(coarse white quartz
conglomerate)

UNCONFORMITY

Oh
Hudson schist
(gneiss and mica schist,
with granite dikes in west-
ern portion; black shale in
northern portion)

UNCONFORMITY

Franklin
limestone
(white marble, containing
pyroxene and much iron
oxide)Metamorphic
(Hudson schist)IGNEOUS ROCKS
(Areas of igneous rocks
are shown by patterns of
triangles and rhombs)Tp
Palisade
diabase
(intrusive sheet form-
ing the Palisades
of the Hudson, and
small dikes east of
Newark)Tw
Watchung
basalt
(three successive lava
flows interbedded in
the Newark formation)sp
Serpentine
(altered igneous rock)bgn
Byram gneiss
(gray granitoid gneiss
composed of quartz,
microcline, feldspar,
and hornblende with a
little pyroxene and
biotite)lgn
Loosee gneiss
(white granitoid gneiss
composed of quartz,
microcline, feldspar,
and in places some
hornblende and biotite)METAMORPHIC ROCKS
OF UNKNOWN ORIGIN
(Areas of metamorphic
rocks of unknown origin
are shown by hachures)pgn
Pochuck gneiss
(dark gneiss composed
of pyroxene, hornblende,
microcline, and quartz,
and in places some
biotite and magnetite)Garnetiferous
graphite schist
(schistose rocks of quartz,
microcline, and graphite,
weathering red)Note: In areas deeply
covered by drift the
patterns are subdued
by an overprint color
and the boundaries are
dotted. The Quaternary
deposits are represented
on the surficial geology
map.

Faults

Known
mineral depositsBelts of
magnetite
deposits

Mines and quarries

R Iron, active within 25 years

GP Graphite

RM Road material

SS Sandstone

LS Limestone

G Granite

X R Abandoned iron mines

X C Abandoned copper mines

X Clay and sand pits
in Newark
formationSedimentary rocks of the
Newark group should be
substituted for Newark
formation.U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

H.M. Wilson, Geographer in charge.
Triangulation by U.S. Coast and Geodetic Survey.
Topography by the U.S. Coast and Geodetic Survey.
The Geological Survey of New Jersey, S.H. Bodfish,
Frank Sutton, R.D. Cummin, E.B. Clark,
J.H. Wheat, J.W. Thom, and W.E. Horton.
Surveyed in 1887, 1889, 1897, 1899, and 1903.

N.Y. AREA SURVEYED IN COOPERATION WITH THE STATE OF NEW YORK.

APPROXIMATE MEAN
DECLINATION 1892.Scale 1:25,000
1 2 3 4 5 Miles
1 2 3 4 5 KilometersContour interval 20 feet.
Datum is mean sea level.
Edition of Mar. 1908.Geology of post-Cambrian by N.H. Darton and H.B. Kümmel.
Geology of pre-Cambrian by W.S. Bayley.
Surveyed in 1895 and 1906.

SURVEYED IN COOPERATION WITH THE STATE OF NEW JERSEY.

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